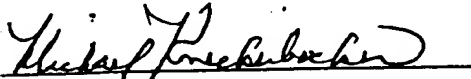


It should be noted that in this study, the drug concentration in the ocular tissues following a single topical dose (of 0.5 mg of azithromycin) was substantially higher than that achieved after oral dosing. In comparison, the mean concentration of azithromycin in the cornea of rabbits was approximately 0.5 µg/g at 4 to 24 hours after a single 15 mg/kg oral dose (R.A. Ferralna memo, July 6, 1989), and 0.82 µg/g (non-inflamed) and 3.0 µg/g (inflamed) at 24 hours after daily doses of 15 mg/kg for 5 days (G. Foulds memo, Nov. 26, 1990).

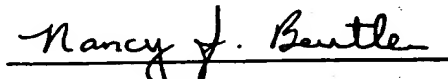
CONCLUSIONS

A single 0.1 g dose of a 0.5% azithromycin ophthalmic ointment was well-tolerated and produced essentially the same minimal and transient changes in the eye as those effected by a commercially available, ophthalmic ointment vehicle (Tearfilm™). These changes, which were limited primarily to slight conjunctival reddening and chemosis, along with slight discharge, were evident several hours after dosing but had subsided completely by the next day.

Assay of the ocular tissues obtained 2 and 24 hours post dose indicated that azithromycin is effectively delivered to the outer tissues of the eye following a single dose of this ointment formulation. Furthermore, drug levels $\geq \text{MIC}_{90}$ (≤ 0.25 µg/ml) of azithromycin for *Chlamydia trachomatis* are sustained over a 24-hour period. This may support once-a-day therapy.



Michael Knickerbocker, B.S.
Scientist
Laboratory Supervisor
Acute Toxicology



Nancy J. Beutler, B.A.
Senior Research Scientist
Study Director



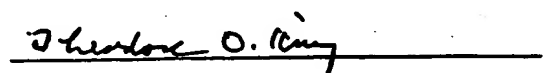
Imran Ahmed, Ph.D.
Project Leader
Pharmaceutical R & D

Reviewed and Approved by:



William M. Kluwe, Ph.D., D.A.B.T.
Director of Preclinical Toxicology

Approved for Distribution by:



Theodore O. King, Ph.D., D.A.B.T.
Senior Director of
Drug Safety Evaluation

cc: Dr. C. L. Holmes
Dr. D. S. Dresback

Dr. G. Foulds
Dr. T. A. Hagen

Mr. D. P. O'Shea
Dr. M. von Schach